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| 10/565,088   | 01/18/2006  | Tino Hansel          | INA-PT169(4248-18-US) | 5596             |
| 3624 7590 08/05/2011   |             |                      |                       |                  |
| VOLPE AND KOENIG, P.C.<br>UNITED PLAZA<br>30 SOUTH 17TH STREET<br>PHILADELPHIA, PA 19103 |             |                      |                       |                  |
| EXAMINER   |             |                      |                       |                  |
| RASHID, MAHBUBUR   |             |                      |                       |                  |
| ART UNIT   |             | PAPER NUMBER         |                       |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

coffice@volpe-koenig.com

**Office Action Summary****Application No.**

10/565,088

**Applicant(s)**

HANSEL, TINO

**Examiner**

MAHBUBUR RASHID

**Art Unit**

3657

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 December 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-9 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9 and 11-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

The amendment of claims 1, 4, 5 and 7 are acknowledged by the examiner.

The cancelation of claims 2 and 10 are acknowledged by the examiner.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1, 3-9 and 11-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The examiner respectfully submits that the applicant does not provide any evidence or support for a lower power level as claimed. According to the paragraph [0050] submitted on 02/02/2009 discloses preventing of a full load on the internal combustion engine or limiting an rpm. There is nothing about the lower power level. Furthermore, the paragraph [0015] and [0019] do not even disclose the phrase "a lower power level" as claimed.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained through the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 3-8, 11-15 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadota et al. (JP 62035154) in view of Inada (JP 2003184682), and further in view of Amisano et al. (US 2002/0029104 A1).

Regarding **claims 1, 3-8, 11-15 and 17**, Kadota et al. teach a power transmission drive comprising

a synchronous drive for an internal combustion engine, with which a rotating angle between a driven member and a drive member can be detected (see abstract; detection is done through 51a),

wherein a member of the power transmission drive includes an electronic controller (51b) which interacts with a control system of the internal combustion engine,

wherein a sensor (51a), comprising a transducer, detects an oscillating angle deviation, a rotating angle deviation, an irregularity in rpm, or a correcting movement between the driven member (33) and the drive member (39) and sends a signal to the controller (51b), which calculates a control parameter, wherein after a defined limit value is exceeded, the controller initiates an emergency program of the internal combustion engine to operate the internal combustion engine at a lower power level (see abstract; phase difference exceeding is considered as an emergency program

during which the gear skip of the belt is prevented by limiting output increase of the engine).

Kadota discloses all claimed limitations as set forth above but does not explicitly disclose a free engine clutch allocated to the driven member or the drive member protects a drive for an accelerated angular velocity of the power transmission drive. Inada teaches a fuel injection pump (40) with the concept of a free engine clutch (50) preventing reverse rotation of the pump (see abstract and also see page 8, line 3 of the remarks submitted on 12/02/2010). Based on the teachings of Inada, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the drive method and emergency program of Kadota et al. to include a clutch/fuel pump system as taught by Inada in the drive member in order to provide same benefits for a proper belt tension in a diesel engine.

The modified system of Kadota does not disclose a fault memory as claimed. Amisano discloses a vehicle clutch control device (34) provided with fault memory that is capable of detecting and measuring error signals (see abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the control device of Kadota with fault memory as taught by Amisano will allow the device function more efficiently and will reduce safety hazards caused by failure to release/engage the clutch.

**Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kadota et al. (JP 62035154) in view of Inada (JP 2003184682), and further in view of Amisano et al. (US 2002/0029104 A1), and further in view of Inagaki et al. (JP 62,180,157).

Regarding **claim 9**, the modified device of Kadota et al. teaches all the structural elements of the claimed invention, as set forth above, but don't explicitly disclose after an oscillating angle deviation, rotating angle deviation, or irregularity in rpm set as a limit value has been exceeded, the controller triggers an acoustic and/or optical signal (see Fig. 8 and page 2 paragraph 2 lower left). Inagaki et al. teach after an oscillating angle deviation, rotating angle deviation, or irregularity in rpm set as a limit value has been exceeded, the controller triggers an optical signal (see Fig. 8 and page 2 paragraph 2 lower left). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mechanism of Kadota et al. to include the optical signal by the controller in order to inform the user of an emergency with a visual indicator.

**Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kadota et al. (JP 62035154) in view of Inada (JP 2003184682), and further in view of Amisano et al. (US 2002/0029104 A1), and further in view of Wilmore (20040251758).

Regarding claim 16, the modified device of Kadota et al. teaches all the structural elements of the claimed invention, as set forth above, but don't explicitly disclose the power transmission drive includes a starter generator, with which the internal combustion engine is started in a start mode, and the internal combustion engine drives

the power transmission drive in a generator mode. Wilmore teaches a hybrid propulsion system for a motor vehicle having the power transmission drive including a starter generator (ISG), with which the internal combustion engine (ICE) is started in a start mode, and the internal combustion engine drives the power transmission drive in a generator mode (see paragraphs 0018 and 0019). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mechanism of Kadota et al. to include the concepts of start and generator modes as taught by Wilmore in order to achieve greater fuel economy and lower emissions.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 3-9 and 11-17 have been considered but are moot in view of the new ground(s) of rejection.

The applicant argues that the output of the engine is maintained at its same level and the limitation requires an program that enables operation of the internal combustion engine at a lower power level. The examiner respectfully disagrees and notes that the paragraphs [0015] and [0019] do not state anything about enabling operation of the internal combustion engine at a lower power level. The phrase "a lower power level" is not even in those paragraphs. However, the examiner further notes that as the applicant agreed that the reference of Kadota et al. specifically teaches that, upon receiving the high level signal S the engine output limiting portion 51b limits an increase in output of an engine to prevent the occurrence of the gear skip in the timing belt 41. In other words, a program has to enable operation of the engine of Kadota at a lower

power level. It is thus, Kadota either alone or combined with Inada, Inagaki et al. and Wilmore discloses all claimed limitation. Therefore, the rejection is proper and valid.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAHBUBUR RASHID whose telephone number is (571)272-7218. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bradley T King/  
Primary Examiner, Art Unit 3657

/M. R./  
Examiner, Art Unit 3657